

WHAT IS CLAIMED IS:

1. A corner key for connecting two or more profiles together, each profile having an end face, a longitudinal drainage and venting passage and a longitudinal securing bore, the corner key comprising:

5 first and second adjacent inner corner faces, first and second adjacent outer corner faces opposite to the inner corner faces, and opposite inner and outer side corner faces extending between the inner and outer corner faces, the inner corner faces being shaped for respective coupling with the profiles;

10 first and second guide arrangements having a tab projecting on one of the inner corner faces and the end faces of the profiles, and an accommodating anchoring channel in the other one of the end faces of the profiles and the inner corner faces, the tab being shaped for fit engagement into the accommodating anchoring channel;

15 first and second bores each extending between a different one of the outer corner faces and one of the inner corner faces opposite to the one of the outer corner faces, the bores being in registration with the securing bores of the profiles when the profiles are coupled with the corner key;

20 first and second fasteners respectively insertable in the bores of the corner key and the profiles in a locking arrangement in which the corner key and the profiles are connected together; and

25 a drainage and venting passage extending between the first and second inner corner faces, the drainage and venting passage having opposite end openings in registration with the drainage and venting passages of the profiles when the profiles are coupled with the corner key.

30 2. The corner key according to claim 1, wherein the tabs project respectively from the first and second inner corner faces of the corner key for fit engagement into the accommodating anchoring channels in the end faces of the profiles.

3. The corner key according to claim 2, wherein the tabs form a right angle with each other.

4. The corner key according to claim 2, wherein the tabs form acute or obtuse angles with each other.

5 5. The corner key according to claim 1, wherein the outer side corner face has a water evacuation and pressure equalization vent in communication with the drainage and venting passage of the corner key and the drainage and venting passage of each profile.

10 6. The corner key according to claim 5, wherein the vent and the drainage and venting passage of the corner key have substantially flush bottom surfaces declining toward the outer side corner face.

15 7. The corner key according to claim 2, wherein the bores of the corner key are located adjacent to the tabs of the corner key.

8. The corner key according to claim 2, wherein the tabs have tapered ends facilitating fit engagement into the anchoring channels.

20 9. The corner key according to claim 8, wherein the tabs and the anchoring channels have matching shapes further facilitating fit engagement of the tabs into the anchoring channels, and wherein each of the tabs has a continuous shape.

25 10. The corner key according to claim 2, wherein the first and second inner corner faces form a right angle with each other and the first and second outer corner faces form a right angle with each other.

30 11. The corner key according to claim 1, wherein the first and second inner corner faces are provided with a sealing element sealing the corner key with the profiles when the profiles are coupled to the corner key.

12. The corner key according to claim 2, wherein the first and second inner

corner faces respectively comprise first and second sealing recesses located adjacent to the tabs, the sealing recesses receiving a sealing element sealing the corner key with the profiles when the profiles are coupled to the corner key.

5 13. The corner key according to claim 12, wherein the inner and/or outer side corner faces comprise extension fins for masking joints created between the inner and/or outer side corner faces and the profiles when the profiles are coupled to the corner key.

10 14. The corner key according to claim 2, wherein the fasteners comprise screws or rivets.

 15. The corner key according to claim 2, wherein the fasteners comprise an adhesive matter or an ultrasound weld.

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 16. The corner key according to claim 12, wherein the first and second inner corner faces have substantially flat surface portions, and the sealing recesses have sloped wall surface portions.

20 17. The corner key according to claim 2, wherein the corner key is made of thermoplastic material or metal.

 18. The corner key according to claim 2, wherein the inner and/or outer side corner face has a chamfered and rounded corner extending between the
25 inner corner faces.

 19. The corner key according to claim 2, wherein the drainage and venting passage of the corner key has an opening in one of the inner corner faces above the end opening of the drainage and venting passage of the corner key in said
30 one of the inner corner faces.

 20. The corner key according to claim 2, wherein the outer side corner face

has a water evacuation and pressure equalization vent in communication with the drainage and venting passage of the corner key and the drainage and venting passage of each profile.

5 21. The corner key according to claim 20, wherein the first and second inner corner faces respectively comprise first and second sealing recesses located adjacent to the tabs, the sealing recesses receiving a sealing element sealing the corner key with the profiles when the profiles are coupled to the corner key.

10 22. The corner key according to claim 21, wherein the inner and/or outer side corner faces comprise extension fins for masking joints created between the inner and/or outer side corner faces and the profiles when the profiles are coupled to the corner key.

15 23. The corner key according to claim 20, wherein the fasteners comprise screws or rivets.

20 24. The corner key according to claim 20, wherein the drainage and venting passage of the corner key has an opening in one of the inner corner faces above the end opening of the drainage and venting passage of the corner key in said one of the inner corner faces.

25 25. The corner key according to claim 1, wherein the inner or outer side corner faces bear logos, trademarks, information or decorations.

26. A frame work assembly comprising:

a) two or more lineal profiles, each having an end face, a longitudinal drainage and venting passage and a longitudinal securing bore; and

30 b) one or more corner keys, each corner key for connecting the two or more profiles together, each corner key having:

first and second adjacent inner corner faces, first and second

adjacent outer corner faces opposite to the inner corner faces, and opposite inner and outer side corner faces extending between the inner and outer corner faces, the inner corner faces being shaped for respective coupling with the profiles;

5 first and second guide arrangements having a tab projecting on one of the inner corner faces and the end faces of the profiles, and an accommodating anchoring channel in the other one of the end faces of the profiles and the inner corner faces, the tab being shaped for fit engagement into the accommodating anchoring channel;

10 first and second bores each extending between a different one of the outer corner faces and one of the inner corner faces opposite to the one of the outer corner faces, the bores being in registration with the securing bores of the profiles when the profiles are coupled with the corner key;

15 first and second fasteners respectively insertable in the bores of the corner key and the profiles in a locking arrangement in which the corner key and the profiles are connected together; and

20 a drainage and venting passage extending between the first and second inner corner faces, the drainage and venting passage having opposite end openings in registration with the drainage and venting passages of the profiles when the profiles are coupled with the corner key.

25 27. The frame work assembly according to claim 26, wherein the tabs project respectively from the first and second inner corner faces of the corner key for fit engagement into the accommodating anchoring channels in the end faces of the profiles.

28. The frame work assembly according to claim 27, wherein the tabs form a right angle with each other.

30 29. The frame work assembly according to claim 27, wherein the tabs form acute or obtuse angles with each other.

30. The frame work assembly according to claim 26, wherein the outer side corner face has a water evacuation and pressure equalization vent in communication with the drainage and venting passage of the corner key and the drainage and venting passage of each profile.

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31. The frame work assembly according to claim 30, wherein the vent and the drainage and venting passage of the corner key have substantially flush bottom surfaces declining toward the outer side corner face.

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32. The frame work assembly according to claim 27, wherein the bores of the corner key are located adjacent to the tabs of the corner key.

33. The frame work assembly according to claim 27, wherein the tabs have tapered ends facilitating fit engagement into the anchoring channels.

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34. The frame work assembly according to claim 33, wherein the tabs and the anchoring channels have matching shapes further facilitating fit engagement of the tabs into the anchoring channels, and wherein each of the tabs has a continuous shape.

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35. The frame work assembly according to claim 27, wherein the first and second inner corner faces form a right angle with each other and the first and second outer corner faces form a right angle with each other.

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36. The frame work assembly according to claim 27, wherein the first and second inner corner faces are provided with a sealing element sealing the corner key with the profiles when the profiles are coupled to the corner key.

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37. The frame work assembly according to claim 27, wherein the first and second inner corner faces respectively comprise first and second sealing recesses located adjacent to the tabs, the sealing recesses receiving a sealing element sealing the corner key with the profiles when the profiles are coupled to

the corner key.

38. The frame work assembly according to claim 37, wherein the inner and/or outer side corner faces comprise extension fins for masking joints created
5 between the inner and/or outer side corner faces and the profiles when the profiles are coupled to the corner key.

39. The frame work assembly according to claim 27, wherein the fasteners
10 comprise screws or rivets.

40. The frame work assembly according to claim 27, wherein the fasteners
comprise an adhesive matter or an ultrasound weld.

41. The frame work assembly according to claim 37, wherein the first and
15 second inner corner faces have substantially flat surface portions, and the sealing recesses have sloped wall surface portions.

42. The frame work assembly according to claim 27, wherein the corner
20 key is made of thermoplastic material or metal.

43. The frame work assembly according to claim 27, wherein the inner
and/or outer side corner face has a chamfered and rounded corner extending
between the inner corner faces.

25 44. The frame work assembly according to claim 27, wherein the drainage and venting passage of the corner key has an opening in one of the inner corner faces above the end opening of the drainage and venting passage of the corner key in said one of the inner corner faces.

30 45. The frame work assembly according to claim 27, wherein the outer side corner face has a water evacuation and pressure equalization vent in communication with the drainage and venting passage of the corner key and the

drainage and venting passage of each profile.

46. The frame work assembly according to claim 45, wherein the first and second inner corner faces respectively comprise first and second sealing
5 recesses located adjacent to the tabs, the sealing recesses receiving a sealing element sealing the corner key with the profiles when the profiles are coupled to the corner key.

47. The frame work assembly according to claim 46, wherein the inner
10 and/or outer side corner faces comprise extension fins for masking joints created between the inner and/or outer side corner faces and the profiles when the profiles are coupled to the corner key.

48. The frame work assembly according to claim 45, wherein the fasteners
15 comprise screws or rivets.

49. The frame work assembly according to claim 45, wherein the drainage and venting passage of the corner key has an opening in one of the inner corner faces above the end opening of the drainage and venting passage of the corner
20 key in said one of the inner corner faces.

50. The frame work assembly according to claim 26, wherein the inner or outer side corner faces bear logos, trademarks, information or decorations.